Rx: Health Care FYI #7

Subject: *Stop Paying for Hospital Acquired Infections*

From: *Rep. Tim Murphy (PA-18)*

The Problem: Preventable infections acquired in hospitals cost $4.5 billion per year and contributed to more than 88,000 deaths—one death every 6 minutes. [1]

Hospital Acquired Infections Are on the Rise:

- There are over 250,000 hospital acquired pneumonias and 23,000 related deaths in the U.S. every year.[2]
- Second only to Japan, the U.S. has the highest rate of methicillin-resistant Staphylococcus aureus (MRSA) or staph infections that are resistant to antibiotics.[3]
- Infections caused by bacteria that are resistant to common antibiotics, including MRSA and vancomycin-resistant enterococci (VRE) or streptococcus infections, lead to higher costs, longer hospital stays, and more deaths for patients.[4]
- In the U.S., MRSA accounts for 51 percent of bacteria acquired by Intensive Care Units (ICUs).[5]
- Although ICUs which care for the sickest of hospitalized patients, have less than 10 percent of beds, they account for over 20 percent of acquired infections.[6] (Note: Patients in ICUs are at higher risk for infections and may be taking immunosuppressive medications which weaken the body's natural defense against infections.)

Hospital Acquired Infections Costs Money and Lives:

- According to the CDC, there are 80,000 infections caused when an IV or tube (catheter) is inserted into a large vein that contains bacteria and infects the bloodstream. These are also called central line infections and cost up to $2.3 billion and up to 20,000 deaths per year in American ICUs. [7]
- Pneumonias caused from bacteria from ventilators costs over $1.5 billion and accounts for 1.75 million additional hospital days a year.[8]

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[1] Weinstein RA. Nosocomial Infection Update. Special Issue. Emerging Infectious Diseases. Vol. 4 No. 3, July Sept 1998.

[2] Wiblin, R. Nosocomial Pneumonia. In: Prevention and Control of Nosocomial Infections, Wenzel, R (Ed), Williams and Wilkins, Baltimore 1997. p.807.

[3] Pittsburgh Regional Health Care Initiative. "Antibiotic resistant infections and you." 2003.

[4] Cosgrove, S, Qi, Y, Kaye, K, et al. The Impact of Methicillin Resistance in Staphylococcus aureus Bacteremia (SAB) on Patient (Pt) Outcomes: Mortality, Length of Stay (LOS), and Hospital Charge (HC), 41st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, IL 2001.

[5] United States National Nosocomial Infection Surveillance (NNIS) system through June 2002

[6] National Nosocomial Infections Surveillance (NNIS) system report, data summary from January 1992-April 2000, issued June 2000. Am J Infect Control 2000; 28:429.

[7] Centers for Disease Control. Guidelines for the Prevention of Catheter Related Infections. August 2002.

[8] Dodek, P, Keenan, S, Cook, D, et al. Evidence-based clinical practice guideline for the prevention of ventilator-associated pneumonia. Annals of Internal Medicine 2004; 141:305.

The Patient's Role:

- Demand that hospital staff wash their hands or use anti-bacterial soaps before treating you for any condition.
- Demand that hospital staff always follow guidelines for patient safety regarding infection control.
- Infections are caused by staff not washing their hands, unclean medical instruments (including stethoscopes, latex gloves, etc.) and bacteria found on hospital charts, beds, medical equipment (x-ray machines, wheelchairs, etc.).

Examples of Success:

- Allegheny General Hospital reduced the rate of central line acquired infections from nineteen to near-zero *within 90 days* and eliminated acquired blood stream infections and related deaths *completely*. One year hospital savings were estimated at $1.12 million and 18 lives were saved**.** This was accomplished by:
    - Educating and training health care staff on infection control;
    - Physicians washing their hands, cleaning equipment, using clean scrubs, and patient generated reminders; and
    - Determining the root cause analysis of infections as they occurred.
- The rate of central line acquired infections in Southwestern Pennsylvania hospitals has been reduced by 55 percent over three years from an infection rate of 4.2 to 1.9 for every 1,000 days by instituting patient safety measures. [9]
- A major teaching hospital in St. Louis reported a reduction in central line acquired infection rates through introduction of a 10-page educational program with mandatory tests for all staff. Fact sheets and posters were also posted. The estimated cost savings following the introduction of this educational program was between $103,600 and $1,573,000. [10]
- The VA Pittsburgh Healthcare system has reduced MRSA infections by 85 percent in an inpatient surgical unit. This was accomplished by:
    - Improving placement of hand hygiene and protective equipment helped lead to a 50 percent increase in soap and sanitizer use;
    - Training 100 percent of the staff on how to prevent transmission of pathogens; and
    - Making sure clean, correct supplies are available.

The Federal Government's Role/Potential Solutions:

- Expand Pay for Performance programs to use the Federal Government's role as the largest payer of health care to reward health care providers that reduce health care acquired infections nationwide.
- Work with states to decrease acquired infections by tying increases to Medicare and Medicaid payments to hospitals that reduce infections.
- Provide support for health information technology to improve reporting of hospital acquired infections.

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[9] Pittsburgh Regional Health Care Initiative. 2004.
[10] Warren et al. *CHEST 2004; 126:1612–1618*

Congressman Tim Murphy, a member of the Energy and Commerce Committee, is a psychologist, and holds two Adjunct Associate Professor positions at the University of Pittsburgh (Pediatrics, and Public Health). He is Co-chair of both the Congressional 21st Century Healthcare Caucus and the Congressional Mental Health Caucus.